

REMARKS

Claims 1 - 198 are pending. By this amendment, claim 99 is amended. No new matter is introduced. Reconsideration and allowance of the claims are respectfully requested.

On page 2, the Office Action indicates that claim 37 would be allowable if written in independent form.

Independent Claims 1, 67, 99, 127, 151, and 169, and Selected Dependent Claims

On page 2 the Office Action rejects claims 1 – 4, 14 – 36, 40 – 48, 67 – 69, 76 – 85, 88 – 101, 104, 105, 107 – 109, 113, 114, 119 – 131, 133 – 136, 140 – 145, 147, 149, 151 – 155, 157, 162, 163, 167, 169, 170, 185, 191, 196, and 198 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,329,590 to Pond (hereafter Pond) in view of U.S. Patent 5,317,391 to Banker et al. (hereafter Banker). This rejection is respectfully traversed.

Regarding claim 1, the Office Action asserts that Pond teaches “a receiver that receives program data and descrambling key code . . . which permits the receiver to descramble the television program,” “a transmitter that sends a program selection to a remote site,” “but is silent on storing the key.” The Office Action also admits that Pond is silent on teaching a digital broadcast system. The Office Action then asserts that Banker teaches using memory for storing authorizations. The Office Action also takes Official Notice that “digital systems are well known in the art.” The Office Action concludes that it would have been obvious to combine Banker with Pond, and to modify Pond by using a digital system, to arrive at the invention as recited in claim 1.

Pond is directed to a system and method for automating the initialization and activation procedure for receiving pay-per-view (PPV) television programming over a satellite television program delivery system. Satellite programs, including PPV programs, may be received at an integrated receiver/descrambler (IRD). The motivation for automating the procedure is to allow television program subscribers to record programs on a video recorder without the subscriber having to be present during the program reception. *See* Pond, column 5, lines 51 – 61. To implement this procedure, Pond discloses a PPV accounting system wherein a subscriber establishes credit with a PPV service provider. “The service provider then transmits an information transfer . . . which contains activation and credit information that is stored in the descrambler module. . . . [and] the IRD is authorized to receive and descramble pay-per-view

program events . . .” *See* Pond, column 8, lines 7 – 27. To view a PPV event, the subscriber then “causes the IRD to . . . [select] the desired satellite and channel . . . [and the] descrambler will then debit the [subscriber’s] credit account . . . and the [subscriber] may then view or record the desired program event . . .” *See* Pond, column 8, lines 30 – 39. The subscriber “may continue to view pay-per-view program events so long as a credit balance remains in the descrambler memory.” *See* Pond, column 8, lines 41 – 43. However, Pond does not disclose or suggest “a transmitter that sends a program selection to a remote site, wherein the program selection is made from the program data . . . [and] wherein when the program selection is received at the remote site, the remote site sends the local authorization code (emphasis added),” as recited in claim 1.

Furthermore, the Office Action specifically asserts that Pond teaches “a transmitter that sends a program selection to remote site, wherein the program selection is made from the program data (col. 7, ll. 4 – 17, col. 7, ll. 32 – 45).” Applicants strongly disagree with the Examiner’s characterization of Pond with respect to this alleged teaching. What Pond actually teaches in the passages cited in the Office Action is: (1) program reception occurs when the subscriber tunes his IRD to a single channel (column 7, lines 4 – 17); and (2) the service provider can communicate with the IRD using a modem, or directly with a satellite broadcast, to provide or receive “usage and billing information” and “descrambling key codes which change from time to time,” column 7, lines 32 – 45. Nowhere does Pond teach a transmitter sending a program selection to a remote site.

Banker is directed to a cable television program delivery system that incorporates information messaging options. Some of Banker’s messages are used to instruct a subscriber where to tune to receive information and data, including PPV authorizations. *See* Banker, column 10, lines 56 – 66. However, Banker does nothing to cure the defects in Pond.

In contrast to Pond and Banker, claim 1 recites “a transmitter that sends a program selection to a remote site, wherein the program selection is made from the program data . . . [and] wherein when the program selection is received at the remote site, the remote site sends the local authorization code (emphasis added).” The transmitter is at the local terminal (i.e., set top terminal, television, etc.). The remote site corresponds to a television program provider (e.g., cable headend, over-the-air broadcast site, satellite broadcast site, etc.). Thus, in contrast to Pond’s IRD, which tunes to a satellite and a single channel, the claimed apparatus sends a

program selection request to a program provider (“remote site”). In response to the received program selection, the program provider (“remote site”) sends the local authorization code. As noted above, Pond discloses only establishing a debit account with a program provider, which, although not clearly stated, presumably results in a descrambling key being sent to the IRD, and with the credit available being recorded at the IRD. Thus, Pond’s descrambling key is not sent upon receipt of a program selection – there is no program selection disclosed in Pond and the descrambling key is only sent when the PPV account is established. From this point on in Pond’s system, PPV program authorization is predicated solely on having a sufficient balance in the debit account recorded in the IRD’s descrambler. *See, inter alia*, column 8, lines 41 – 43.

Because Pond and Banker, individually and in combination, do not disclose or suggest all of the features recited in claim 1, claim 1 is allowable.

Regarding independent claims 67, 99, 127, 151, and 169, the Office Action asserts that the limitations of these independent claims have been addressed in the discussion of claims 1 and 16. Regarding claim 16, the Office Action asserts that Pond teaches transmitting activation information by satellite, that multiplexing and demultiplexing authorization codes in notoriously well known in the art, and that, therefore, it would have been obvious to one of ordinary skill in the art to modify Pond by multiplexing and demultiplexing the authorization code from the satellite information.

Regarding claim 67, Pond does not disclose or suggest multiplexing a program (whose access is controlled by a local authorization code) “with other digital broadcast programs,” as recited in claim 67. Instead, in Pond’s system the IRD is tuned to “a single channel from the broad band signal” to view the PPV event. *See* Pond, column 7, lines 4 – 7. Pond’s way of transmitting PPV events is typical of prior art PPV systems, and Applicants’ claimed invention specifically overcomes these limitations of the prior art. That is, the claimed program multiplexing involves transmitting two or more programs over a single channel. Nothing in Pond discloses or suggests this program multiplexing. Banker does nothing to cure this defect in Pond. Accordingly, claim 67 is allowable.

Claim 99 is amended to recite features similar to those in allowable claim 67, namely, “wherein the one or more programs are multiplexed with other digital programs in the broadcast television digital programming.” As noted above with respect to claim 67, this feature is not

disclosed or suggested by Pond and Banker, individually, and in combination. Accordingly, amended claim 99 is allowable.

Regarding claim 127, Pond and Banker, individually and in combination do not disclose or suggest “broadcasting the program, wherein the program is multiplexed with other digital programs.” Accordingly, claim 127 is allowable.

Regarding claim 151, Pond discloses tuning to a single channel to receive a program event. *See* Pond, column 7, lines 4 – 9. However, Pond does not disclose or suggest “receiving a program order, wherein the program order requests access to more than one program being broadcast simultaneously,” as recited in claim 151. Banker does nothing to cure this defect in Pond. Accordingly, claim 151 is allowable.

Similar to claim 67, claim 169 recites a program that is authorized by the local authorization code “is multiplexed with other digital broadcast television programs.” Pond and Banker, individually, and in combination, do not disclose or suggest this feature. Accordingly, claim 169 is allowable.

Claims 2 – 4, 14 – 36, and 40 – 48 depend from allowable claim 1; claims 68, 69, 76 – 85, and 88 – 98 depend from allowable claim 67; claims 101, 104, 105, 107 – 109, 113, 114, and 119 – 126 depend from allowable claim 99; claims 131, 133 – 136, 140 – 145, 147, and 149 depend from allowable claim 127; claims 152 – 155, 157, 162, 163, and 167 depend from allowable claim 151; and claims 170, 185, 191, 196, and 198 depend from allowable claim 169, and for this reason, and the additional features they recite, these claims are also allowable. Withdrawal of the rejection of claims 1 – 4, 14 – 36, 40 – 48, 67 – 69, 76 – 85, 88 – 101, 104, 105, 107 – 109, 113, 114, 119 – 131, 133 – 136, 140 – 145, 147, 149, 151 – 155, 157, 162, 163, 167, 169, 170, 185, 191, 196, and 198 under 35 U.S.C. § 103(a) is respectfully requested.

Claims 5 - 8

On page 9, the Office Action rejects claims 5 – 8 under 35 U.S.C. § 103(a) over Pond in view of Banker, and further in view of U.S. Patent 5,237,610 to Gammie et al. (hereafter Gammie). This rejection is respectfully traversed.

Regarding claim 5, the Office Action acknowledges that Pond does not disclose a smart card, but asserts that Gammie teaches a smart card, and cites to columns 18 – 19, lines 48 – 2. However, Gammie only discloses use of a smart card to incorporate a microprocessor. Gammie does not disclose or suggest a smart card incorporated into a digital television wherein the smart

card contains a first receiver, a transmitter and a processor. Accordingly, Gammie does not disclose all the structural features recited in claim 5, and claim 5 is allowable. In addition, claim 5 is allowable because of its dependence on allowable claim 1.

Regarding claim 6, the Office Action admits that Pond is silent on a second receiver incorporated into a digital television, but the Office action then takes "Official Notice" that co-locating equipment is well known in the art.

Applicants strenuously object to this basis for rejecting claim 6. The inventive concept recited in claim 6 is not co-location of equipment, but instead is incorporating a second receiver in the digital television, wherein the second receiver displays the digital broadcast television programs. This feature is most definitely not taught or suggested by Pond, and Applicants assert that such a structural feature is not something the Examiner can dismiss simply by taking "Official Notice." Thus, claim 6 is allowable. In addition, claim 6 depends from allowable claim 1, and for this reason, claim 6 is also allowable.

Regarding claim 7, the Office Action admits that Pond is silent on a receiver module, processor, transmitter, and memory contained on a smart card; however, the Office Action then asserts that Gammie teaches a smart card incorporating these features. However, the Office Action has not pointed to any part of Gammie to support this assertion.

As discussed above with respect to the rejection of claim 5, Gammie discloses a smart card incorporating a microprocessor. Gammie does not disclose a smart card incorporating a receiver module, processor, transmitter and memory as recited in claim 7. Accordingly, claim 7 is allowable. In addition, claim 7 depends from allowable claim 1, and for this reason is also allowable.

Regarding claim 8, Applicants contend that the rejection is improper. The Office Action admits that Pond is silent on a demultiplexer. The Office Action then asserts that demultiplexers are an inherent function of a digital television, but provides no citation for this assertion.

Applicants respectfully disagree with the Office Action's assertion, and request that the Examiner provide a specific reference for its rejection. Further, Applicants point out that claim 8 recites more than just a demultiplexer. In particular, claim 8 recites a demultiplexer that demultiplexes received digital broadcast television programs. Accordingly, claim 8 is allowable. In addition, claim 8 depends from allowable claim 1, and for this reason, claim 8 is also allowable.

For at least the reasons noted above, claims 5 – 8 are allowable. Withdrawal of the rejections of claims 5 – 8 under 35 U.S.C. § 103(a) is respectfully requested.

Claims 9 and 10

On page 11, the Office Action rejects claims 9 and 10 under 35 U.S.C. § 103(a) over Pond and Banker in view of U.S. Patent 5,675,390 to Schindler et al. (hereafter Schindler). This rejection is respectfully traversed.

The Office Action admits that Pond is silent on a first receiver incorporated into a personal computer, and is silent on using a personal computer. The Office Action then asserts that Schindler teaches using a personal computer for a receiver, and takes Official Notice that using a computer in lieu of a receiver is well known in the art.

Schindler describes a home entertainment system in which a personal computer receives a digital video signal and displays the signal on a separate monitor. However, Pond and Schindler, individually and in combination, do not disclose or suggest a “first receiver . . . incorporated in a personal receiver,” as recited in claim 9 and a “second receiver . . . incorporated into a digital television,” as recited in claim 10. Accordingly, claims 9 and 10 are allowable. In addition, claims 9 and 10 depend from allowable claim 1, and for this reason are also allowable. Withdrawal of the rejection of claims 9 and 10 under 35 U.S.C. § 103(a) is respectfully requested.

Claims 49 – 53, 55, 56, 58, 60 – 66, 70 – 75, 172 – 173, and 175 – 178

On page 11, the Office Action rejects claims 49 – 53, 55, 56, 58, 60 – 66, 70 – 75, 172 – 173, and 175 – 178 under 35 U.S.C. § 103(a) over Pond in view of Banker, and further in view of U.S. Patent 5,353,121 to Young et al. (hereafter Young). This rejection is respectfully traversed.

Claims 49 – 53, 55, 56, 62, 64 – 66, 70, 71, 73 – 75, 172, 173, and 175 – 178 depend from allowable claim 1, and for this reason and the additional features they recite, claims 49 – 53, 55, 62, 64 – 66, 70, 71, 73 – 75, 172, 173, and 175 – 178 are also allowable.

Regarding claim 58, the Office Action admits that Pond is silent on overlay menus and hidden menus but asserts that Young teaches overlay menus and that, therefore, it would have been obvious to combine Young and Pond. However, the Examiner obviously could not find any disclosure or suggestion for use of hidden menus in either Young or Pond. Claim 58 recites both overlay menus and hidden menus. Since Pond and Young, individually and in combination,

do not disclose or suggest hidden menus, claim 58 is allowable. In addition, claim 58 depends from allowable claim 1, and for this reason is also allowable.

Regarding claim 60, the Office Action admits that Pond is silent on a time out feature but that Banker teaches a time out (referring to Banker, Figure 9D) and that it would have been obvious to one of ordinary skill in the art to modify Pond by using time outs to deauthorize the display and prevent charges.

Banker discloses tuning to a barker channel to display a message if the subscriber terminal has been disconnected from a cable for a predetermined period of time. *See* Banker, column 9, lines 51 – 60. However, Banker does not disclose or suggest use of a time out feature to send “a cancel program order that deauthorizes display of the program selection and prevents a charge,” as recited in claim 60. Further, the Examiner has shown nothing in either Pond or Banker that would suggest use of a time out for this purpose. Instead, the Examiner is relying on impermissible hindsight for the position that the features of claim 60 are suggested by the combination of Pond and Banker. For these reasons, claim 60 is allowable. In addition, claim 60 depends from allowable claim 1, and for this reason, claim 60 is also allowable.

Regarding claim 61, the Office Action takes “Official Notice” that the time out feature is in effect prior to the display of the program selection and that it would have been obvious to modify Pond by using the time out feature prior to displaying in order to inhibit unauthorized viewing of programs.

Applicants respectfully question how the Examiner can take Official Notice that the time out feature is in effect prior to display of the program selection. What is the basis for this “notice?” Can the Examiner cite one reference for this proposition, or is the examiner merely relying on hindsight? Furthermore, claim 61 recites the additional feature of the time out feature in effect for five minutes after display of the program selection. The Office Action does not address this feature of claim 61. Because claim 61 recites features that are not disclosed or suggested by any references cited in the Office Action, claim 61 is allowable. In addition, claim 61 depends from allowable claim 1, and for this reason is also allowable.

Regarding claim 63, the Office Action takes “Official Notice” that hard copy event codes and program identifiers are notoriously well known in the art. However, claim 63 recites the event codes and program identifiers are entered into the apparatus to send the program selection. This feature of claim 63 is not addressed in the rejection of claim 63. Accordingly, the rejection

of claim 63 is improper, and claim 63 is allowable. In addition, claim 63 depends from allowable claim 1, and for this reason, claim 63 is also allowable.

Regarding claim 72, the Office Action states that the limitations of claim 72 "have been addressed in the discussion of claim 49 – 53. However, claim 72 recites "the electronic program guide is provided on a web page of an Internet, and wherein the terminal accesses the web page to receive the electronic program guide." This limitation of claim 72 cannot be found in any of claims 49 – 53. Accordingly, the discussion of claim 49 – 53 cannot address the limitations of claim 72, and the rejection of claim 72 is improper. Thus, claim 72 is allowable. In addition, claim 72 depends from allowable claim 67, and for this reason, claim 72 is also allowable.

For at least the reasons discussed above, claims 49 – 53, 55, 56, 58, 60 – 66, 70 – 75, 172 – 173, and 175 – 178 are allowable. Withdrawal of the rejection of claims 49 – 53, 55, 56, 58, 60 – 66, 70 – 75, 172 – 173, and 175 – 178 under 35 U.S.C. § 103(a) is respectfully requested.

Claims 59, 102, 103, 112, 112, 132, 139, 148, and 156

On page 14, the Office Action rejects claims 59, 102, 103, 112, 132, 139, 148, and 156 under 35 U.S.C. § 103(a) over Pond in view of Banker, and further in view of U.S. Patent 5,940,073 to Klosterman et al. (hereafter Klosterman) and "Prodigy offers total television online guide," (hereafter Prodigy). This rejection is respectfully traversed.

Applicants note that the subject matter of claim 59 is disclosed in copending U.S. patent application serial 07/991,074, filed on December 9, 1992, and in U.S. patent application 08/160,280, filed December 2, 1993, now U.S. Patent 5,600,364, of which the present application is a continuation-in-part. Thus, Prodigy is not prior art to claim 59. Similarly, Prodigy is not prior art to claims 102, 103, 112, 132, 139, 148, and 156. For this reason, claims 59, 102, 103, 112, 132, 139, 148, and 156 are allowable.

In addition to the above, claim 59 depends from allowable claim 1, claims 102, 103, and 112 depend from allowable claim 99, claims 132, 139, and 148 depend from allowable claim 127, and claim 156 depends from allowable claim 151, and for this reason, claims 59, 102, 103, 112, 132, 139, 148, and 156 are allowable. Withdrawal of the rejection of claims 59, 102, 103, 112, 132, 139, 148, and 156 under 35 U.S.C. § 103(a) is respectfully requested.

Claim 57

On page 15, the Office Action rejects claim 57 under 35 U.S.C. § 103(a) over Pond in view of Banker, and further in view of U.S. Patent 5,629,733 to Youman et al. (hereafter Youman). This rejection is respectfully requested.

The Office Action admits that Pond fails to teach a submenu including program selection and description submenus, but that Youman shows a submenu including program selection.

Applicants note that the subject matter of claim 57 is disclosed in copending U.S. patent application serial 07/991,074, filed on December 9, 1992, of which the present application is a continuation-in-part. Thus, Youman is not prior art to claim 57, and claim 57 is allowable. In addition, claim 57 depends from allowable claim 1, and for this reason, claim 57 is also allowable. Withdrawal of the rejection of claim 57 under 35 U.S.C. § 103(a) is respectfully requested.

Claims 54 and 174

On page 16, the Office Action rejects claims 54 and 174 under 35 U.S.C. § 103(a) over Pond in view of Banker, Young and Klosterman. This rejection is respectfully requested.

Applicants note that the subject matter of claims 54 and 174 is disclosed in copending U.S. patent application serial 07/991,074, filed on December 9, 1992, of which the present application is a continuation-in-part. Thus, Klosterman is not prior art to claims 54 and 174, and claims 54 and 174 are allowable. In addition, claim 54 depends from allowable claim 1 and claim 174 depends from allowable claim 169, and for this reason, claims 54 and 174 are also allowable. Withdrawal of the rejection of claims 54 and 174 under 35 U.S.C. § 103(a) is respectfully requested.

Claims 158 – 164, 168, 171, 179 – 182, 188 – 192, 195, and 198

On page 16, the Office Action rejects claims 158 – 164, 168, 171, 179 – 182, 188 – 192, 195, and 198 under 35 U.S.C. § 103(a) over Pond in view of Banker, and further in view of U.S. Patent 5,374,951 to Welsh (hereafter Welsh) and U.S. Patent 5,410,344 to Graves et al. (hereafter Graves). This rejection is respectfully traversed.

Claims 158 – 164 and 168 depend from allowable claim 151, and claims 171, 179 – 182, 188 – 192, 195, and 198 depend from allowable claim 169, and for this reason, claims 158 – 164, 168, 171, 179 – 182, 188 – 192, 195, and 198 are also allowable. Withdrawal of the rejection of

claims 158 – 164, 168, 171, 179 – 182, 188 – 192, 195, and 198 under 35 U.S.C. § 103(a) is respectfully requested.

Claims 165, 166, 183, 193, and 194

On page 17, the Office Action rejects claims 165, 166, 183, 193, and 194 under 35 U.S.C. § 103(a) over Pond in view of Banker, Welsh, Graves, Klosterman, and Prodigy. This rejection is respectfully traversed.

Applicants note that the subject matter of claims 165, 166, 183, 193, and 194 is disclosed in copending U.S. patent application serial 07/991,074, filed on December 9, 1992, and in U.S. patent application 08/160,280, filed December 2, 1993, now U.S. Patent 5,600,364, of which the present application is a continuation-in-part. Thus, Prodigy is not prior art to claims 165, 166, 183, 193, and 194, and claims 165, 166, 183, 193, and 194 are allowable. In addition, claims 165 and 166 depend from allowable claim 151, and claims 183, 193, and 194 depend from allowable claim 169, and for this reason, claims 165, 166, 183, 193, and 194 are also allowable. Withdrawal of the rejection of claims 165, 166, 183, 193, and 194 under 35 U.S.C. § 103(a) is respectfully requested.

Claims 185, 186, 196, and 197

On page 18, the Office Action mentions claims 185, 186, 196, and 197, but does not provide a specific rejection of these claims. Applicants note that claims 185, 186, 196, and 197 depend from allowable claim 169, and for this reason and the additional features they recite, claims 185, 186, 196, and 197 are allowable.

For at least the reasons set forth above, applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further is desired in order to place the application in even better condition for allowance, the Examiner is invited to contact applicants' undersigned representative at the telephone number listed below.

Attached hereto is a marked-up version of the changes made to the claims by this amendment. The attached pages are captioned "Version with markings to show changes made."

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Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Amend Claim 99 as follows:

99 (Amended) A method for providing broadcast television digital programming, comprising:

- generating program data related to the digital programming;
- providing the program data;
- displaying the program data as a program menu;
- receiving a program order, the program order designating one or more programs for viewing;
- sending a program authorization; and
- broadcasting the digital programming, wherein the program authorization provides access to the one or more programs designated by the program order, and wherein the one or more programs are multiplexed with other digital programs in the broadcast television digital programming.